## ALLIANCE OF AUTOMOBILE MANUFACTURERS - 76-81 GHZ PROCEEDING

- The FCC should permit <u>primary</u> licensed vehicular radar operations in the 76-81 GHz band under Part 95 of the FCC's rules.
  - Permitting vehicular radar operations in the 76-81 GHz band will enable manufacturers to further develop and deploy short-range vehicular radars for safety applications (e.g., autonomous braking, collision warning, lane departure warning, and blind spot detection). These critical safety-of-life applications need primary licensed status.
  - The 76-81 GHz band is well-suited for vehicular radar: it allows for more effective operations using a higher concentration of transmitters with limited range.
  - o Importantly, vehicular radars will not interfere with 76-81 GHz band incumbents.
- The FCC should not, however, allow fixed infrastructure radar operations in the 76-81 GHz band at this time.
  - Fixed infrastructure radars pose an unacceptable risk of interference to vehicular radar systems, which are essential to critical automotive safety applications.
  - The NPRM's proposal to broadly allow fixed radar in the 76-81 GHz band ignores differences in the physical characteristics of fixed and vehicular radars that could make the two generally incompatible.
  - Fixed radar interference would reduce the detection range of vehicular radar.
  - Fixed radar proponents have not shown that they can coexist with other 76-81 GHz operations.
- The FCC should be careful not to harm existing vehicular radar use of the 24 GHz band.
  - o The FCC should clarify that it will not phase out the ability to secure new 24 GHz narrowband vehicular radar equipment certifications under sections 15.245 and 15.249 of the FCC's rules.
    - Every major U.S. automobile manufacturer has installed narrowband 24 GHz vehicular radar in their automobiles based on this authority and all hope to continue to be able to do so in the future.
    - No jurisdiction has phased out 24 GHz narrowband vehicular radar equipment certification.
  - The FCC does not need to phase out the authorization of new 24 GHz wideband and ultra wideband ("UWB") vehicular radar equipment currently permitted under sections 15.252 and 15.515 of the FCC's rules.
    - Prohibiting future 24 GHz certifications for such equipment would deprive manufacturers of needed flexibility while serving no significant purpose.
    - It would also unnecessarily harm stakeholders that have already invested time and capital into developing and deploying 24 GHz wideband and UWB systems.
  - o If the FCC ultimately decides to phase-out the authorization of new wideband or UWB 24 GHz vehicular radar equipment, it should continue to grant new authorizations for such equipment until at least <u>January 1, 2022</u>. This would harmonize any U.S. transition away from 24 GHz wideband or UWB vehicular radar with the European transition plan.
    - Prematurely cutting off the development and deployment of new 24 GHz wideband and UWB vehicular radar systems would artificially suspend innovation in such equipment.
    - Flexibility to use either the 24 GHz or 76-81 GHz bands for vehicular radar would facilitate the development of new technologies and promote competition without compromising the future usefulness of the 24 GHz band.